

APRIL/MAY 2025

**23UEDA32B — COMPUTER NETWORKS
(Elective III)**

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. List the uses of network hardware.
2. What is Network Software?
3. Name the parameters that are used to measure the network performance.
4. What are the two types of duplex?
5. Write short notes on error correction.
6. Mention any two issues of data link layer.
7. State Routing Protocol.
8. What are datagram?
9. Define Congestion control.
10. What is WWW?



SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL questions.

11. (a) What do you mean by computer network and uses of computer networks?

Or

- (b) Name the five basic network topologies and explain it.

12. (a) Describe the theoretical basis for data communication.

Or

- (b) Compare Circuit switching and Packet switching.

13. (a) Difference between Pure ALOHA and Slotted ALOHA.

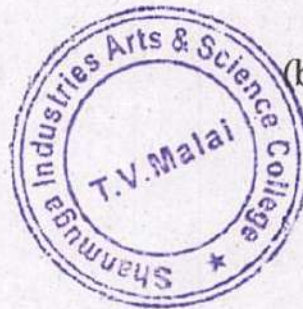
Or

- (b) Write a procedure for simplex stop-and-wait protocol.

14. (a) Elaborate the IP address security threats.

Or

- (b) Illustrate the network layer design issues.



15. (a) What are the five basic functions of email system? Explain.

Or

- (b) Explain the design issues of application layer.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Delegate about seven layers of ISO OSI reference model.

17. What are the Guided media? Explain two of them.

18. Explain in detail about the Error Detection and Correction codes.

19. Demonstrate Congestion Control? Describe the principles of congestion control.

20. Discuss in detail about Electronic Mail.